

## **Community-Scale Air Toxics Ambient Monitoring**

- **The FY07 announcement is closed (4/17/07)**
- **The FY08 announcement should open sometime 2008**

What is it? Solicitation for proposals on projects designed to assist state and local communities in one of the following:

- 1) Community-Scale Air Toxics Monitoring (Mercury included) - identifying and profiling air toxics sources, characterizing the degree and extent of local air toxics problems, and tracking progress of air toxics reduction activities.
- 2) Methods Development / Evaluation - developing and assessing emerging measurement methods
- 3) Analysis of Existing Data

How much: FY07 was for up to \$750,000 per grant, this is a 103 grant so no matching funding requirements.

How many awarded: Should be around 20 awards nationally.

Who can apply: awarded exclusively with State and Tribal Assistance Grant (STAG) funds; Air Pollution Control Agencies (APCA). Local/university groups may apply through an APCA.

### **Air Toxics Solicitation/Awarded - Plans**

To see plans go to this website:

<http://www.epa.gov/ttn/amtic/local.html>

### **Grants and Funding**

This page provides access to information about funding opportunities available from EPA's Office of Air and Radiation (OAR) including closed RFP's for these monitoring solicitations:

[http://www.epa.gov/air/grants\\_funding.html#0516](http://www.epa.gov/air/grants_funding.html#0516)

### **Contacts**

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# **Community Scale Air Toxics Air Monitoring Grants Awarded in Region 8**

## **Clearing the Air: Understanding Air Toxics and Carbonyl Pollutant Sources at the Urban/Mountain Interface**

Environmental Health Division Air/Waste Program  
Boulder County Public Health  
And  
University of Colorado – Boulder  
Boulder, CO 80309

Awarded: March 22, 2006

Monitoring Started: March 1, 2007

Monitoring Target End: February 28, 2008

Award: \$488,933.00

Boulder County sits at the confluence of the pristine high alpine wilderness of the Rocky Mountains and the heavily urbanized city of Denver, Colorado, and the agricultural and intensive oil and gas activities in neighboring counties. This urban/rural interface creates a complex air quality environment characterized by shifting upslope and downslope conditions that can intensify air toxics in relatively pristine environments.

Previous studies indicate that secondary pollutants such as acetaldehyde and formaldehyde are significant air toxics risk drivers and are also indicative of ozone formation along the Colorado Front Range (Anderson, et. al 1996).

Boulder County Public Health (BCPH) and its partners are proposing to monitor for VOC and carbonyl measurements at five locations to aid in air toxics model evaluation and air toxics source apportionment. This study will evaluate the City and County of Denver's regional air toxics model. Timely carbonyl and tracer gases will enable the county to better assess the impacts from primary and secondary air toxics pollutant sources in the urban-mountain interface.

This proposal is intended to provide targeted ambient air toxics monitoring to improve our understanding of the spatial and temporal variations of air toxics identified in previous monitoring efforts and to enhance model-to-monitor validation of a community-scale air dispersion model. The monitoring will also validate a human health assessment and evaluate the impacts of point, mobile, and area sources (e.g. wood burning, oil and gas exploration) on air toxics and carbonyls. The study will meet the category-specific guidelines as follows:

- 1) Delineate concentrations of local scale air toxics. Build upon previous studies that have identified levels of acetaldehyde and formaldehyde well in excess of those found in more densely urbanized neighboring areas and National Air Toxics Assessment (NATA) predictions. Use monitoring and modeling, assess the impact of secondary pollutants and understand the spatial and temporal variations of air toxics at the urban/mountain interface.

- 2) Evaluate and improve air quality exposure models. Use the spatial and temporal air toxics monitoring data to evaluate the NATA results for Boulder County and an established community-scale air dispersion model.
- 3) Support assessments of health effects. Provide timely data to address community concerns and to support and evaluate two extensive health consultations conducted in collaboration with the Agency for Toxic Substances and Disease Registry in northwest Boulder County.
- 4) Develop a baseline reference for longer-term measuring. Create a monitoring and modeling capability, in partnership with the University of Colorado and the City and County of Denver, which can be built upon in subsequent years.
- 5) Guide air quality management strategies in Boulder County.

Monitoring consists of 5 sites throughout Boulder County Colorado monitoring O<sub>3</sub>, select VOCs (TO15), and carbonyls (TO11a) using standard EPA methods and quality assurance.

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**Airing on the Side of Caution:**  
**The Denver Air Toxics Assessment – Phase III: 2005-06 Air Toxics Monitoring**

**Denver Department of Environmental Health**  
**Division of Environmental Quality**

Awarded August 11, 2004  
Monitoring Started: Jun 2005  
Monitoring Ended: May 2006  
Award: \$344,708.00

The purpose of this project is to collect data concerning air toxics concentrations in the City and County of Denver. This project focuses on collecting both temporally and spatially resolved data for selected air toxics in Denver. The air toxics monitoring data will be used to evaluate an already established community scale air dispersion model, as well as comparing with the most recent National Air Toxics Assessment (NATA) results for Denver. The base data to be collected in this project will be 24 hour average concentration data collected with a one-in-six day sampling frequency. This data will be collected simultaneously at four different sampling sites, and be used to provide the basic spatial resolution required for the project.

- 24 hr average VOCs & carbonyls @ 4 sites (TO-17 and TO-11A)
- Portable Trailer Site: – 9 months at one site, 3 months at another
- 1hr VOC, 1hr black carbon, CO, ozone
- 4hr VOCs and carbonyls (TO-17)
- 24hr canister (TO-15)
- Aethalometer and autoGC (lots of data)

Report due August 2007